



# BREAD ON MARS?



## SpaceBakery

**Vertical Farm and Bakery for Mars bring sustainability to Earth**

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# At Puratos we are committed to the next generation and a reliable partner in innovation for our customers on **EARTH AND BEYOND**

**“The Mars research program aims to bring innovations that meet new consumer demands”**

## **INVESTIGATING HOW TO PRODUCE BREAD ON MARS, REQUIRES US TO :**

-  Limit water use
-  Minimize energy requirements
-  Produce crops independent of agricultural land
-  Develop well balanced, highly nutritional finished goods
-  Recycle waste streams to produce fertilizers or other circular products
-  Implement sensor technologies to monitor and steer processes remotely
-  Evaluate (energy) efficient baking technologies

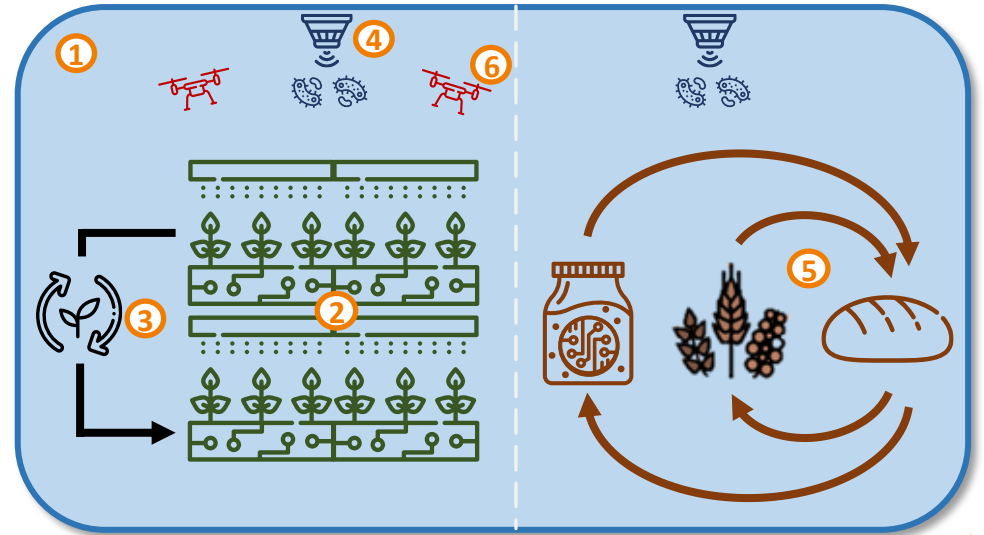


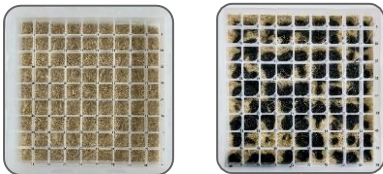
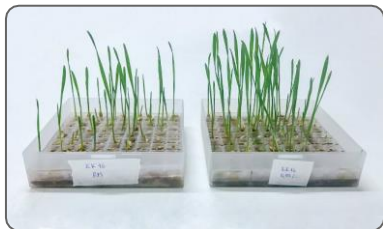
# Mission to Mars - SpaceBakery

Closed and self-sustainable modular system which is independent from agricultural land and climate, with optimal use of resources

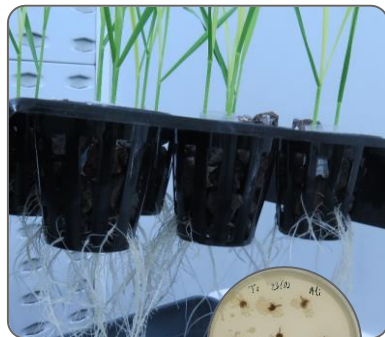


Clusters for Growth





Biochar



Plant microbiology



Vertical farming



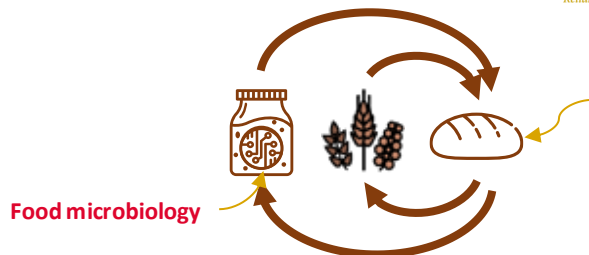
Plant sensors



3D growth model



October 26, 2021 11AM  
streamed from Belgian  
Pavilion on the Expo  
2020 Dubai



POC on a commercial drone

